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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/482,229	01/13/2000	Raymond Rubacha	10205.023	6709

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Scottsdale, AZ 85254

EXAMINER

SINGH, RAMNANDAN P

ART UNIT	PAPER NUMBER
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2644

DATE MAILED: 05/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/482,229

Applicant(s)

RUBACHA ET AL.

Examiner

Ramnandan Singh

Art Unit

2644

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 13-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 13-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 5/03-01-04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 04 March 2004 have been considered but are moot in view of the new ground(s) of rejection.

2. **Status of Claims**

Claims 5-12 are cancelled.

New claim 14 is added.

Claims 1-4, 13-15 are pending.

Specification

3. The disclosure is objected to because of the following informalities:

On page 6, line 23, the specification recites "controller **60**". This is in error.

Replace the term ""controller **60**" with the term "controller **61**".

Appropriate correction is required.

Claim Objections

4. Claim 1 is objected to because of the following informalities:

Claim 1 recites the limitation "**said gain control input;**" in line 5.

Replace the term "**said gain control input;**" with the term "**said gain control input; and**". A similar thing holds for claim 13.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1, 13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitations "the gain" in 9, and "the signal" in lines 9-10.

There are insufficient antecedent bases for these limitations in the claim. A similar thing holds for claim 13.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1-2 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Dallavalle et al [US 5,606,625].

Regarding claim 1, Dallavalle et al teach a digital circuit for controlling the gain of an amplifier stage [col. 1, lines 56-61], as shown in Fig. 1, comprising:

an amplifier having a gain control input for receiving digital data (i.e. **CR(7-1)**) and a signal input (i.e. **AL(3-0)**); and

a register (i.e. **storage register 11**) having an output (i.e. **AL(3-0)**) coupled to the gain control input; and

a digital adder 9 coupled to the register 11 for storing data in the register and having a pair of inputs (i.e. **AC(3-0)** and **AL(3-0)**), the adder 9 having a control input (i.e. **AC(3-0)**) for adding or subtracting data on the inputs of the adder 9;

wherein the adder 9 adjusts a gain of the amplifier in accordance with a signal on the control input (i.e. **AC(3-0)**) [col. 2, lines 30-62; col. 5, lines 45-61; col. 7, lines 45-53].

Claim 13 is essentially similar to claim 1 and is rejected for the reasons stated above.

Regarding claim 2, Dallavalle et al further teach a control loop comprising an up-down counter 7 and a storage memory register 11, coupled to the adder 9 for holding a gain of the amplifier at a predetermined value (i.e. **gain setting**) [col. 5, lines 59-61].

Claim Rejections - 35 USC § 103

9. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

10. Claims 3-4, 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dallavalle et al as applied to claims 1 and 13 above, and further in view of Flora et al [US 4,675,905].

Regarding claim 3, Dallavalle et al do not teach expressly a summation circuit for summing multiple inputs arbitrarily .

Flora et al teach a summation circuit controlled by a programmable processor 80, as shown in Fig. 3, for mixing multiple audio signals arbitrarily and producing a resultant signal thereafter [col. 3, line 31 to col. 4, line 2].

Dallavalle et al and Flora et al are analogous art because they are from a similar problem solving area, viz. , eliminating transient signals in an electronic device.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the summation circuit of Flora et al with Dallavalle et al wherein the output signal of the summation circuit is coupled, as an input signal, to the Dallavalle's circuit.

The suggestion/motivation for doing so would have been to eliminate transient signals while combining multiple signals [Flora et al; col. 1, lines 10-12; col. 1, lines 26-30; col. 8, lines 15-17].

Claim 14 is essentially similar to claim 3 and is rejected for the reasons stated above.

Regarding claim 4, Flora et al further teach the summation circuit that includes logic for selecting one or all or combination of signals from a set of several inputs, wherein Figs. 4 and 5 of Flora et al illustrate one implementation of the summation circuit [Fig. 3] including logic [col. 4, line 63 to col. 5, line 4].

11. Claims 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dallavalle et al as applied to claim 13 above, and further in view of Moore et al [US 6,608,898 B1].

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Regarding claim 14, Dallavalle et al do not teach expressly a telephone having a summation node coupled to a signal input.

Moore et al teach a telephone having a summation node coupled to a signal input [Figs. 1, 4; col. 4, lines 18-30; col. 2, lines 39-65; col. 3, lines 12-19].

Dallavalle et al and Moore et al are analogous art because they are from a similar problem solving area, viz. , telephonic communications.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the summation circuit of Moore et al with Dallavalle et al wherein the output signal of the summation circuit is coupled, as an input signal, to the Dallavalle's circuit.

The suggestion/motivation for doing so would have been to reduce noise while combining multiple signals received from comb filters (or band pass filters) [col. 2, lines 3-6].

Claim 15 is essentially similar to claim 14 and is rejected for the reasons stated above.

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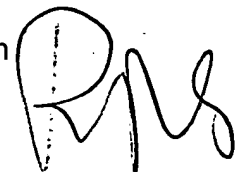
Conclusion

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ramnandan Singh whose telephone number is (703)308-6270. The examiner can normally be reached on M-F(8:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Forester Isen can be reached on (703)-305-4386. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ramnandan Singh
Examiner
Art Unit 2644

A handwritten signature in black ink, appearing to be 'RMS' or similar, written in a cursive style.